WHAT IS CLAIMED IS:

1.   A network interface device, comprising:

a first interface operable to receive at least two incoming calls over a subscriber line;

5   a   second   interface   operable   to   facilitate communication between the first interface and a first telephone line and between the first interface and a second telephone line, the second interface also operable to generate one or more first ring voltages on the first

10   telephone line and one or more second ring voltages on the second telephone line; and

a processor coupled to the first interface and the second interface, the processor operable to instruct the second interface to generate the first and second ring

15   voltages in response to receiving the incoming calls, the processor also operable to allocate the first and second ring voltages among the first and second telephone lines to ensure that a total instantaneous load placed on the second interface does not exceed a determined threshold

20   level.

2.   The   network   interface   device   of   Claim   1, wherein the processor is operable to allocate the first and second ring voltages by staggering the first and

25   second ring voltages such that the one or more first ring voltages on the first telephone line are generated at different times than the one or more second ring voltages on the second telephone line.

3. The network interface device of Claim 2, wherein the processor staggers the first and second ring voltages after determining that the total instantaneous load placed on the first and second telephone lines

5   exceeds the determined threshold level.

4. The network interface device of Claim 1, wherein the processor is operable to allocate the first and second ring voltages by instructing the second

10 interface to generate the first and second ring voltages simultaneously.

5. The network interface device of Claim 4, wherein the processor instructs the second interface to

15 generate the first and second ring voltages simultaneously after determining that the total instantaneous load placed on the first and second telephone lines does not exceed the determined threshold load.

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6. The network interface device of Claim 1, wherein the second interface is further operable to measure a load placed on each of the telephone lines.

7. The network interface device of Claim 1, wherein the processor is further operable to:

extract class of service information from the incoming calls; and

5   communicate the class of service information for each incoming call to the telephone line associated with the incoming call during the generation of the ring voltage on the telephone line associated with the incoming call.

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8. The network interface device of Claim 1, wherein:

the second interface is further operable to decode dual-tone multi-frequency touch tones received over one 15   of the telephone lines and to communicate the decoded tones to the processor; and

the processor is further operable to:

map all telephone numbers associated with the telephone lines to a selected telephone line in response 20   to a first function identified by the decoded tones;

map a selected telephone number to a selected telephone line in response to a second function identified by the decoded tones; and

redirect an incoming call from one of the 25   telephone lines to another of the telephone lines in response to a third function identified by the decoded tones.

9.   The network interface device of Claim 1, further comprising a local power supply operable to supply at least some power to at least one of the processor, the first interface, and the second interface;

5   wherein the network interface device draws power from the subscriber line after the local power supply fails; and

        wherein the second interface remains operable to communicate over at least one of the telephone lines
10   after the local power supply fails.

        10.   The network interface device of Claim 1, wherein the processor is further operable to instruct a switch to alternately couple one of the telephone lines
15   to either the second interface or a splitter, the splitter operable to receive ringing power for the telephone line and line power for the network interface device, the splitter operable to communicate the line power to the network interface device and the ringing
20   power to the telephone line.

        11.   The network interface device of Claim 1, further comprising a third interface coupled to the processor and operable to communicate with at least one
25   digital device.

12.   The   network   interface   device   of   Claim   11,
wherein:

the   first   interface   comprises   at   least   one   of   a
Digital   Subscriber   Line   (DSL)   interface,   a   cable
5   interface, and a wireless interface;

the   second   interface   comprises:

at   least   one   subscriber   line   interface   circuit
coupled   to   at   least   one   of   the   telephone   lines   and
operable to generate the ring voltage on the at least one
10   telephone line;

at   least   one   codec   coupled   to   at   least   one
subscriber line interface circuit and operable to convert
analog   information   into   digital   information   and   to
convert digital information into analog information; and

15   a   digital   signal   processor   coupled   to   the   at
least   one   codec   and   to   the   processor,   the   digital   signal
processor operable to sample digital information from the
at least one codec and to communicate the samples to the
processor,   the   digital   signal   processor   also   operable   to
20   receive   digital   information   from   the   processor   and
communicate   the   digital   information   to   the   at   least   one
codec; and

the third interface comprises at least one of a Home
Phoneline   Network   Alliance   interface,   an   Ethernet
25   interface,   a   local   area   network   interface,   an   optical
interface, and a wireless interface.

13.   The   network   interface   device   of   Claim   1,
wherein each of the one or more first ring voltages have
30   a   duration   of   two   seconds   followed   by   a   four   second
pause.

14. A method for providing service to a subscriber, comprising:

receiving at least two incoming calls over a subscriber line;

5   identifying a first telephone line and a second telephone line associated with the incoming calls; and

allocating one or more first ring voltages and one or more second ring voltages among the first and second telephone lines, the first and second ring voltages

10   allocated to ensure that a total instantaneous load placed on a network interface device coupled to the first and second telephone lines does not exceed a determined threshold level.

15   15. The method of Claim 14, wherein allocating the first and second ring voltages comprises staggering the first and second ring voltages such that the one or more first ring voltages on the first telephone line are generated at different times than the one or more second

20   ring voltages on the second telephone line.

16. The method of Claim 15, wherein staggering the first and second ring voltages comprises staggering the first and second ring voltages after determining that the

25   total instantaneous load placed on the first and second telephone lines exceeds the determined threshold level.

17. The method of Claim 14, wherein allocating the first and second ring voltages comprises initiating

30   simultaneous generation of the first and second ring voltages.

18. The method of Claim 17, wherein initiating simultaneous generation of the first and second ring voltages comprises initiating simultaneous generation of the first and second ring voltages after determining that the total instantaneous load placed on the first and second telephone lines does not exceed the determined threshold load.

19. The method of Claim 14, further comprising measuring a load placed on each of the telephone lines.

20. The method of Claim 14, further comprising:

extracting class of service information from the incoming calls; and

communicating the class of service information for each incoming call to the telephone line associated with the incoming call during the generation of the ring voltage on the telephone line associated with the incoming call.

21. The method of Claim 14, further comprising:

decoding dual-tone multi-frequency touch tones received over one of the telephone lines;

mapping all telephone numbers associated with the telephone lines to a selected telephone line in response to a first function identified by the decoded tones;

mapping a selected telephone number to a selected telephone line in response to a second function identified by the decoded tones; and

redirecting an incoming call from one of the telephone lines to another of the telephone lines in response to a third function identified by the decoded tones.

22. The method of Claim 14, further comprising:

drawing at least some power for the network interface device from a local power supply;

drawing power from the subscriber line after the local power supply fails; and

allowing communication over at least one of the telephone lines after the local power supply fails.

23. The method of Claim 14, further comprising instructing a switch to alternately couple one of the telephone lines to either the network interface device or a splitter, the splitter operable to receive ringing power for the telephone line and line power for the network interface device, the splitter operable to communicate the line power to the network interface device and the ringing power to the telephone line.

24.   The   method   of   Claim   14,   further   comprising communicating with at least one digital device.

25.   The method of Claim 14, wherein each of the one or   more   first   ring   voltages   have   a   duration   of   two seconds followed by a four second pause.

26. Software for providing service to a subscriber, the software embodied in at least one computer-readable medium and when executed by one or more processors operable to:

5   receive at least two incoming calls over a subscriber line;

identify a first telephone line and a second telephone line associated with the incoming calls; and

instruct an interface to the first and second

10   telephone lines to generate one or more first ring voltages on the first telephone line and one or more second ring voltages on the second telephone line, the first and second ring voltages allocated to ensure that a total instantaneous load placed on the interface does not

15   exceed a determined threshold level.

27. A network interface device, comprising:

means for receiving at least two incoming calls over a subscriber line;

means for generating one or more first ring voltages on a first telephone line and one or more second ring voltages on a second telephone line; and

means for allocating one or more first ring voltages and one or more second ring voltages among the first and second telephone lines, the first and second ring voltages allocated to ensure that a total instantaneous load placed on a network interface device coupled to the first and second telephone lines does not exceed a determined threshold level.

28. A network interface device, comprising:

a first interface operable to receive at least two incoming calls over a subscriber line;

a second interface operable to facilitate

5   communication between the first interface and a first telephone line and between the first interface and a second telephone line, the second interface also operable to generate one or more first ring voltages on the first telephone line and one or more second ring voltages on

10 the second telephone line; and

a processor coupled to the first interface and the second interface, the processor operable to instruct the second interface to generate the first and second ring voltages in response to receiving the incoming calls, the

15 generation of the ring voltages staggered such that the one or more first ring voltages on the first telephone line are generated at different times than the one or more second ring voltages on the second telephone line.

29. A network interface device, comprising:

a first interface operable to receive at least two incoming calls over a subscriber line;

a second interface operable to facilitate communication between the first interface and a first telephone line and between the first interface and a second telephone line, the second interface also operable to generate one or more first ring voltages on the first telephone line and one or more second ring voltages on the second telephone line; and

a processor coupled to the first interface and the second interface, the processor operable to:

determine whether a total load placed on the first and second telephone lines exceeds a threshold load; and

instruct the second interface to generate the first and second ring voltages on the telephone lines, the first and second ring voltages generated simultaneously when the total load placed on the telephone lines does not exceed the threshold load, the first and second ring voltages staggered when the total load placed on the telephone lines exceeds the threshold load.